(FILE 'HOME' ENTERED AT 18:11:00 ON 18 MAY 2004)

FILE 'MEDLINE, BIOTECHDS, EMBASE, BIOSIS, SCISEARCH, CANCERLIT, CAPLUS'
ENTERED AT 18:11:09 ON 18 MAY 2004
L1   2385 S CHRISTIANS F?/AU OR COLE K?/AU
L2   306 S RIBOSOME DISPLAY
L3   337413 S ARRAY OR MICROARRY OR PROBE ARRAY OR CHIP OR BIOCHIP
L4   14 S L2 AND L3
L5   0 S L1 AND L2
L6   47 S L1 AND L3
L7   16 S L6 AND (POLYPEPTIDE OR PROTEIN OR PEPTIDE)
L8   12 S L4 AND (PROTEIN OR POLYPEPTIDE OR PEPTIDE)
L9   8 DUP REM L7 (8 DUPLICATES REMOVED)
L10   10 DUP REM L8 (2 DUPLICATES REMOVED)
L11   24 S L2 AND (PROB## OR OLIGONUCLEOTID## OR OLIGO#)
L12   5 S L11 AND (ARRAY OR MICROARRAY OR SOLID SUPPORT OR CHIP OR BIOC
L13   5 DUP REM L12 (0 DUPLICATES REMOVED)
L14   19 DUP REM L11 (5 DUPLICATES REMOVED)
L15   18 S L2 AND (NUCLEIC ACID TAG OR TAG?)
L16   8 DUP REM L15 (10 DUPLICATES REMOVED)

=>

WEST Search History

| Hide Items | Restore | Clear | Cancel |

DATE: Tuesday, May 18, 2004

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,USOC,EPAB,DWPI; PLUR=YES; OP=ADJ	
☐	L1	Baskerville-D$.in. and ribosome display	0
☐	L2	Baskerville-D$.in.	8
☐	L3	ribosome display	250
☐	L4	L2 and l3	0
☐	L5	array or microarray or probe array	622709
☐	L6	l3 and l5	152
☐	L7	l3 same l5	26
☐	L8	l6 and (screen$ near (polypeptide or protein))	81
☐	L9	L8 and tag$	76
☐	L10	L9 and (binding affinity)	62
☐	L11	L10 and (drug near candidate)	31
☐	L12	l9 and ((different or plurality) near (oligonucleotide or probe))	10
☐	L13	l8 and ((different or plurality) near (oligonucleotide or probe))	10
☐	L14	l6 and ((different or plurality) near (oligonucleotide or probe))	19
☐	L15	l3 and ((different or plurality) near (oligonucleotide or probe))	24
☐	L16	christians-F$.in. or cole-K$.in.	104
☐	L17	ribosome display	250
☐	L18	(tagged polypeptide) or (polypeptide near tag$)	2659
☐	L19	L18 and L17	19
☐	L20	L19 and (nucleic acid tag or DNA tag or oligo$ tag or polynucleotide tag)	10
☐	L21	L20 and (array or microarray)	10
☐	L22	polynucleotide tag$ or oligonucleotide tag$ or nucleic acid tag$ or oligo$ tag$ or DNA tag$	496
☐	L23	L22 and L17	18
☐	L24	L23 and (array or microarray)	16
☐	L25	L16 and ribosome display	1
☐	L26	L16 and L18	2
☐	L27	L26	2

END OF SEARCH HISTORY

Generate Collection | Print

L7: Entry 12 of 26   File: PGPB   Jul 31, 2003

DOCUMENT-IDENTIFIER: US 20030143616 A1
TITLE: Addressable protein arrays

Summary of Invention Paragraph:
[0010] In another related aspect, the invention features a solid support including an array of immobilized capture probes; each of the capture probes includes a non-nucleosidic spacer group and an oligonucleotide sequence to which a ribosome display particle is bound (for example, hybridized or covalently bound).

Detail Description Paragraph:
[0052] Ordered, addressable arrays of peptide fragments can also be prepared. To prepare these arrays, the fusion library is generated from short synthetic DNA sequences or fragments of cDNAs or genomic DNAs. In another variation, ribosome display particles, such as those described in Gold et al., WO 93/03172, can be hybridized to the solid support to generate the protein array. Again, these particles are immobilized on the solid support through a hybridization reaction between the capture oligo and the protein-coding RNA.

CLAIMS:

25. A solid support comprising an array of immobilized capture probes, each of said capture probes comprising a non-nucleosidic spacer group and an oligonucleotide sequence to which a ribosome display particle is bound.

☐   Generate Collection   Print

L7: Entry 22 of 26   File: USPT   Mar 25, 2003

DOCUMENT-IDENTIFIER: US 6537749 B2
TITLE: Addressable protein arrays

Brief Summary Text (11):
In another related aspect, the invention features a solid support including an
array of immobilized capture probes; each of the capture probes includes a non-
nucleosidic spacer group and an oligonucleotide sequence to which a ribosome
display particle is bound (for example, hybridized or covalently bound).

Detailed Description Text (22):
Ordered, addressable arrays of peptide fragments can also be prepared. To prepare
these arrays, the fusion library is generated from short synthetic DNA sequences or
fragments of cDNAs or genomic DNAs. In another variation, ribosome display
particles, such as those described in Gold et al., WO 93/03172, can be hybridized
to the solid support to generate the protein array. Again, these particles are
immobilized on the solid support through a hybridization reaction between the
capture oligo and the protein-coding RNA.

Hit List

Search Results - Record(s) 1 through 10 of 10 returned.

☐ 1. Document ID: US 20040071705 A1

Using default format because multiple data bases are involved.

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L13: Entry 1 of 10                          File: PGPB              Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040071705
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040071705 A1


TITLE: Serum protein-associated target-specific ligands and identification method
therefor

PUBLICATION-DATE: April 15, 2004


INVENTOR-INFORMATION:
NAME                      CITY               STATE     COUNTRY       RULE-47
Sato, Aaron K.            Somerville         MA        US
Edge, Albert              Newton             MA        US

US-CL-CURRENT: 424/145.1; 435/7.1
```

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De

☐ 2. Document ID: US 20040048311 A1

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L13: Entry 2 of 10                          File: PGPB              Mar 11, 2004

PGPUB-DOCUMENT-NUMBER: 20040048311
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040048311 A1


TITLE: Use of collections of binding sites for sample profiling and other
applications

PUBLICATION-DATE: March 11, 2004


INVENTOR-INFORMATION:
NAME                      CITY               STATE     COUNTRY       RULE-47
Ault-Riche, Dana          Los Gatos          CA        US
Kassner, Paul D.          San Mateo          CA        US
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US-CL-CURRENT: 435/7.1; 436/518

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐   3.   Document ID: US 20040043384 A1

L13: Entry 3 of 10   File: PGPB   Mar 4, 2004

PGPUB-DOCUMENT-NUMBER: 20040043384
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040043384 A1

TITLE: In vitro protein translation microarray device

PUBLICATION-DATE: March 4, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Oleinikov, Andrew V.	Mill Creek	WA	US	

US-CL-CURRENT: 435/6; 435/287.2, 435/69.1

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐   4.   Document ID: US 20040005709 A1

L13: Entry 4 of 10   File: PGPB   Jan 8, 2004

PGPUB-DOCUMENT-NUMBER: 20040005709
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040005709 A1

TITLE: Hybridization control of sequence variation

PUBLICATION-DATE: January 8, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hoogenboom, Henricus Renerus Jacobus Mattheus	Maastricht		NL	
Somers, Veerle	Sint-Truiden		BE	

US-CL-CURRENT: 435/455; 435/320.1, 435/91.2

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐   5.   Document ID: US 20030219752 A1

L13: Entry 5 of 10   File: PGPB   Nov 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030219752

PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030219752 A1

TITLE: Novel antigen binding molecules for therapeutic, diagnostic, prophylactic, enzymatic, industrial, and agricultural applications, and methods for generating and screening thereof

PUBLICATION-DATE: November 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Short, Jay M.	Rancho Santa Fe	CA	US	

US-CL-CURRENT: 435/6; 435/320.1, 435/325, 435/326, 435/69.1, 435/7.1, 530/387.1, 536/23.1

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |

☐ 6.   Document ID: US 20030143681 A1

L13: Entry 6 of 10   File: PGPB   Jul 31, 2003

PGPUB-DOCUMENT-NUMBER: 20030143681
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030143681 A1

TITLE: Human ataxin-1-like polypeptide IMX97018

PUBLICATION-DATE: July 31, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Anderson, Dirk M.	Seattle	WA	US	

US-CL-CURRENT: 435/69.1; 435/199, 435/254.2, 435/320.1, 435/325, 435/6, 536/23.2

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |

☐ 7.   Document ID: US 20030143612 A1

L13: Entry 7 of 10   File: PGPB   Jul 31, 2003

PGPUB-DOCUMENT-NUMBER: 20030143612
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030143612 A1

TITLE: Collections of binding proteins and tags and uses thereof for nested sorting and high throughput screening

PUBLICATION-DATE: July 31, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ault-Riche, Dana	Palo Alto	CA	US	
Kassner, Paul D.	San Mateo	CA	US	

US-CL-CURRENT: 435/6; 435/7.1

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐ 8.   Document ID: US 20030130827 A1

L13: Entry 8 of 10   File: PGPB   Jul 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030130827
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030130827 A1

TITLE: Protein design automation for protein libraries

PUBLICATION-DATE: July 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bentzien, Joerg	White Plains	NY	US	
Dahiyat, Bassil I.	Altadena	CA	US	
Desjarlais, John R.	Pasadena	CA	US	
Hayes, Robert J.	Pasadena	CA	US	
Vielmetter, Jost	Altadena	CA	US	

US-CL-CURRENT: 703/11; 435/7.1

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐ 9.   Document ID: US 20030087232 A1

L13: Entry 9 of 10   File: PGPB   May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087232
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030087232 A1

TITLE: Methods for screening polypeptides

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Christians, Fred	Los Altos	CA	US	
Cole, Kyle B.	Palo Alto	CA	US	

US-CL-CURRENT: 435/6; 530/322, 530/395

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

☐ 10. Document ID: US 20020137053 A1

L13: Entry 10 of 10   File: PGPB   Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020137053
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020137053 A1

TITLE: Collections of binding proteins and tags and uses thereof for nested sorting and high throughput screening

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ault-Riche, Dana	Palo Alto	CA	US	
Kassner, Paul D.	San Mateo	CA	US	

US-CL-CURRENT: 435/6; 435/287.2, 435/7.9

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D |

| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS |

Term	Documents
DIFFERENT	3799668
DIFFERENTS	249
PLURALITY	2938570
PLURALITIES	20280
PLURALITYS	5
OLIGONUCLEOTIDE	66476
OLIGONUCLEOTIDES	56501
PROBE	263712
PROBES	125837
(8 AND ((OLIGONUCLEOTIDE OR PROBE) NEAR (DIFFERENT OR PLURALITY))).PGPB,USPT,USOC,EPAB,DWPI.	10
(L8 AND ((DIFFERENT OR PLURALITY) NEAR (OLIGONUCLEOTIDE OR PROBE))).PGPB,USPT,USOC,EPAB,DWPI.	10

Display Format: | - | Change Format

<u>First Hit</u>

☐ | Generate Collection | Print |

L7: Entry 9 of 26   File: PGPB   Nov 6, 2003

DOCUMENT-IDENTIFIER: US 20030207265 A1
TITLE: Method of making protein arrays

<u>Detail Description Paragraph</u>:
[0028] Once the nucleic acid <u>array</u> has been produced, the nucleic acid <u>array</u> can then be used to produce proteins under appropriate conditions. Methods used to produce proteins from nucleic acids in vitro are known in the art and include Roberts, R. W. and Szostak, J. W., Proc. Natl. Acad. Sci. (1997), 94(23):12297-12302 "RNA-Peptide Fusions for the In Vitro Selection of Peptides and Proteins," Hanes et al., Nat. Biotechnol. (2000) 18:1287-92 "Picomolar Affinity Antibodies from a Fully Synthetic Naive Library Selected and Evolved by <u>Ribosome Display</u>," and Mattheakis et al., Proc. Natl. Acad. Sci. (1994), 91:9022-9026 "An In Vitro Polysome Display System for Identifying Ligands from Very Large Peptide Libraries," each of which is hereby incorporated by reference in its entirety for all purposes. The proteins, in turn, are immobilized to the mRNA or they can then be immobilized to a support using methods known to those skilled in the art. Features of the protein <u>arrays</u> can be determined using methods known to those skilled in the art.

<u>Detail Description Paragraph</u>:
[0166] Accordingly, <u>ribosome display</u> is used to create an <u>array</u> of proteins that are expressed from and non-covalently attached to an <u>array</u> of nucleic acids as described by Hanes et al. and Mattheakis et al.. The nucleic acids preferably are mRNAs containing a 3' spacer encoding a C terminus spacer that is attached to the functional protein encoded by the mRNA. The nucleic acids can be synthesized by any of a number of techniques known in art, including standard protocols for automated synthesis of RNA (Millipore) or enzymatic synthesis of RNA from a cloned DNA template expressed under the control of an appropriate promoter, such as a T7 promoter that is used with a T7 RNA polymerase transcription system (Promega). The nucleic acids are arrayed as described above in Example 1A.